

CLAIM AMENDMENTS

Claim 1 (withdrawn): An organic light-emitting device, comprising:

an anode glass base;

a hole transporting layer overlapped on said anode glass base;

an organic light-emitting layer overlapped on said hole transporting layer such that said hole transporting layer is sandwiched between said anode glass base and said organic light-emitting layer;

an electron transporting layer overlapped on said organic light-emitting layer;

a metallic cathode layer overlapped on said electron transporting layer; and an organic buffer layer, which is overlappedly disposed between said electron transporting layer and said metallic cathode layer, having a hydrophilic head group firmly bonding with said metallic cathode layer and a lipophilic tail group firmly bonding with said electron transporting layer such that said organic buffer layer forms as a heat insulating media between said organic light-emitting layer and said metallic cathode layer for preventing an uneven thermal expansion difference therebetween during operating said organic light-emitting device.

Claim 2 (withdrawn): An organic light-emitting device, as recited in claim 1, wherein said organic buffer layer is made of fatty acid salt having a chemical structure containing five to twenty carbon atoms (C.₅ to C.₂₀), wherein said head group of said fatty acid salt is formed as hydrophilic and said tail group of said fatty acid salt is formed as lipophilic.

Claim 3 (withdrawn): An organic light-emitting device, as recited in claim 1, wherein said organic buffer layer has a thickness from 2 to 4 nanometers.

Claim 4 (withdrawn): An organic light-emitting device, as recited in claim 2, wherein said organic buffer layer has a thickness from 2 to 4 nanometers.

Claim 5 (withdrawn): An organic light-emitting device, as recited in claim 2, wherein said fatty acid salt is composed of sodium stearate (NaSt).

Claim 6 (withdrawn): An organic light-emitting device, as recited in claim 4, wherein said fatty acid salt is composed of sodium stearate (NaSt).

Claim 7 (withdrawn): An organic light-emitting device, as recited in claim 2, wherein said fatty acid salt is composed of zinc stearate (ZnSt).

Claim 8 (withdrawn): An organic light-emitting device, as recited in claim 4, wherein said fatty acid salt is composed of zinc stearate (ZnSt).

Claim 9 (withdrawn): An organic light-emitting device, as recited in claim 2, wherein said fatty acid salt is composed of aluminum stearate (AlSt).

Claim 10 (withdrawn): An organic light-emitting device, as recited in claim 4, wherein said fatty acid salt is composed of aluminum stearate (AlSt).

Claim 11 (withdrawn): An organic light-emitting device, as recited in claim 2, wherein said fatty acid salt is composed of sodium oleate (NaOl).

Claim 12 (withdrawn): An organic light-emitting device, as recited in claim 4, wherein said fatty acid salt is composed of sodium oleate (NaOl).

Claim 13 (withdrawn): An organic light-emitting device, as recited in claim 2, wherein said fatty acid salt is composed of sodium zincate (NaZt).

Claim 14 (withdrawn): An organic light-emitting device, as recited in claim 4, wherein said fatty acid salt is composed of sodium zincate (NaZt).

Claims 15-20 (cancelled).

Claim 21 (new): A method of producing an organic light-emitting device, comprising the steps of:

- (a) forming a hole transporting layer overlapping on an anode glass base;
- (b) forming an organic transporting layer overlapping on said hole transporting layer;
- (c) forming an electron transporting layer overlapping on said organic transporting layer;

(d) forming a metallic cathode layer; and

(e) producing an insulating organic buffer layer and bonding said insulating organic buffer layer to said electron transporting layer with a lipophilic tail group thereof and bonding to said metallic cathode layer with a hydrophilic head group thereof in such a manner that said insulating organic buffer layer is sandwiched and forms a heat insulating media between said electron transporting layer and said metallic cathode layer for preventing an uneven thermal expansion difference therebetween during operating said organic light-emitting device, wherein said insulating organic buffer layer is produced by the following steps:

(e1) providing a fatty acid salt having a chemical structure containing five to twenty carbon atoms (C₅ to C₂₀), wherein a head group of said fatty acid salt is formed as said hydrophilic head group and said tail group of said fatty acid salt is formed as said lipophilic tail group; and

(e2) growing said fatty acid salt through a thermal deposition system having a vacuum degree above 1.0×10^{-3} Pascal, and a temperature between 300°C to 400°C, to control a growing speed of said fatty acid from 0.1 to 0.9 nanometer per minute so as to produce said insulating organic buffer layer.

Claim 22 (new): The method, as recited in claim 21, wherein, in the step (e2), said thermal deposition system is operated under a vacuum pressure of 1×10^{-6} Pascal.

Claim 23 (new): The method, as recited in claim 22, wherein said fatty acid salt is composed of sodium stearate (NaSt) to form said organic buffer layer has a thickness from 2 to 4 nanometers, wherein said temperature is controlled at 340°C ± 1°C to ensure a growth rate of said organic buffer layer from 0.3 to 0.5 nanometer per minute.

Claim 24 (new): The method, as recited in claim 22, wherein said fatty acid salt is composed of zinc stearate (ZnSt) to form said organic buffer layer has a thickness of about 2 nanometers and said temperature is controlled at about 300°C.

Claim 25 (new): The method, as recited in claim 22, wherein said fatty acid salt is composed of aluminum stearate (AlSt) to form said organic buffer layer has a thickness about 3 nanometers and said temperature is controlled at about 350°C.

Claim 26 (new): The method, as recited in claim 22, wherein said fatty acid salt is composed of sodium oleate (NaOl) to form said organic buffer layer has a thickness about 4 nanometers and said temperature is controlled at about 400°C.